Sequence for One-Half Hour Drives

Drive One Objectives

Environment: Parking Lot

- Preparation to Drive
- Orientation to Controls/Adjustments
- All Occupants Buckled Up
- Starting the Vehicle
- Steering Wheel Control
- Putting the Vehicle into Motion
- Managing Speed Control
- On/Off Targeting (Vision Control)
  - — Turn Head before Turning Wheel
- Tracking on a Straight Path
- Stopping Smoothly with Controlled Braking
- Stopping Quickly with Threshold Braking
- Securing and Exiting the Vehicle

Drive Two Objectives

Environment: Low Speed, Low Risk Traffic

- Locating Reference Points
- Selecting Lane Positions
- Searching Intersections
- Responding to Signs/Signals/Markings
- Entering Intersections
- Turning Right from a Stop and While Moving
- Turning Left from a Stop and While Moving
- Backing on a Straight Path
- Backing While Turning

Drive Three Objectives

Environment: Low Risk Traffic

- Responding to Traffic Signs, Signals, Markings
  - — Yielding Right of Way
  - — Selecting Where to Stop
- Searching to the Front
- Approaching and Recognizing Intersection Types
- Searching Intersections
  - — Identifies Line-of-Sight/Path-of-Travel (LOS-POT) Restrictions
- Controlling Space to the Front
  - — Judging Distance in Seconds
  - — Establishing Following Time
  - — Selecting Lane Positions
- Entering Intersections
- Changing Lanes
- Reading Instruments

Drive Four Objectives

Environment: Moderate Traffic

- Evaluating Target Path
- Searching to the Front
- Responding to LOS/POT Conditions
- Selecting Lane Positions
- Applying Speed Control
- Stopping With Vehicle in Front
- Using Staggered Stops for Space Management
- Delaying Moving for two Seconds
- Identifying Open/Closed Zones
- Using Share Lanes
- Passing and Being Passed

Drive Five Objectives

Environment: Low Risk Traffic

- Selecting and Performing Turnabout Options
  - — Mid-Block U-Turn
  - — Intersection U-Turn
  - — Two-Point—Right and Left
  - — Three-Point
- Forward Perpendicular Parking
- Angle Parking

Drive Six Objectives

Environment: Low to Moderate Traffic and Speeds, Parking Lot

- Space Management
- Backing into Perpendicular Parking
- Backing into an Alley or Driveway
- Making Legal Stops and Staggered Stops
- Responding to Signs/Signals/Markings
- Practice Commentary Driving

Drive Seven Objectives

Environment: Moderate Speeds and Traffic

- Space Management
- Searching for Curves in Target Area
  - — Adjusting for Best Speed
  - — Adjusting for Best Lane Position
- Searching Through Curves
- Driving Through Curves
  - — Approach
  - — Visual Search
  - — Speed Control/Trail Braking
  - — Lane Position
- Managing Vehicle Balance
- Driving Up and Down Hills
  - — Selecting Best Lane Position
  - — Maintaining Speed Control
  - — Stopping and Starting on a Hill
  - — Parking on Hills

Drive Eight Objectives

Environment: Complex with Increased Speeds & Traffic

- Space Management
- Using a Visual Search Pattern
- Recognizing Rear Zone Changes
- Controlling Rear Zone
- Keeping Three-Four Second Following Time
- Navigating One-Way Streets
- Communication and Courtesy

Drive Nine Objectives

Environment: Moderate Speeds and Traffic

- Space Management
- Passing and Being Passed on Two-Lane Roads
- Practicing ABS Braking (when available)

Drive Ten Objectives

Environment: Interstate or Simulated Environment

- Space Management
- Entering, Lane Changing and Exiting Limited Access Highways
- Handling Emergency Situations (simulated if needed)

Drive Eleven Objectives

Environment: Complex with Increased Speeds and Traffic

- Space Management
- Managing Zones
- Sharing the Road with Other Users
- Communication and Courtesy
- Parallel Parking
- Driving at Night (when available)
- Rail Grade Crossing
- 10 Good Driving Habits Review

Drive Twelve Objectives

- Skills Assessment (ideally with parent/guardian)

In-Car Behaviors

Non-Moving Skills

Preparing to Operate
_____Approaches the vehicle with awareness
_____Checks traffic and enters and locks doors
_____Places key in ignition
_____Adjusts seat position, head restraint, steering wheel, and safety belt
_____Adjusts rearview and sideview mirrors to reduce blind areas
_____Checks all passengers are buckled up

Starting the Vehicle
_____Checks that the parking brake is set
_____Checks gear selector lever is in PARK
_____Places right foot on brake, heel on floor
_____Places left foot on "dead pedal"
_____Turns engine "on" and checks gauges, alert lights, warning lights
_____Turns key to start engine
_____Adjusts accessories as needed
_____Turns on headlights both day and night, if not automatic

Exiting and Securing the Vehicle
_____Locates safe parking location
_____Sets parking brake and shifts into PARK (or REVERSE) for standard transmission) before removing foot from brake
_____Turns off appropriate accessories; closes all windows
_____Turns off ignition, moves key to locked position; removes key
_____Visually checks for safe exit from vehicle
_____Unfastens safety belt
_____Opens door and exits quickly when safe
_____Locks doors and activates available alarm system

Vision Control

_____Identifies Target
_____Tracks on a straight path

Steering Wheel Control

_____Starts with a balanced hand position on the wheel at or below the 9:3 positions

Push-Pull/Hand-to-Hand Steering
_____Uses for precision maneuvers
_____Starts from a balanced hand position
_____One hand pushes, the other hand pulls
_____Hands move between 1:5 and 11:7 positions
_____Keeps hands on outside of steering wheel rim
_____Slides hands continuously and smoothly for input and stabilization

Hand-Over-Hand Steering
_____Uses when steering speed is critical and vision is limited
_____Uses the top third of the steering wheel
_____One hand pushes while the other hand pulls
_____Moves wheel continuously and quickly into turn
_____Recovers wheel smoothly and returns hands to 9:3 positions
_____Controls all movements with hands on the wheel

One Hand Steering
_____Used when backing in a straight line and parallel parking
_____Shifts hip and seating position to look out the rear and side windows
_____Places right hand on top of passenger's seat
_____Left hand grips the top of the wheel, using small adjustments in steering
_____Maintains "walking" speed while backing

Motion Control

Accelerator Control
_____Slows by releasing the accelerator pedal
_____Keeps heel on floor, pivots from brake to accelerator
_____Moves inch by inch for accelerator control practice
_____Maintains steady speed and increases to desired speed
_____Increases speed smoothly
_____Decelerates gradually

Braking Control
_____Checks rear zone prior to braking
_____Applies smooth, steady, controlled braking
_____Brings the vehicle to a smooth stop
_____Eases pressure off brake during the last two seconds of braking to reduce vehicle pitch force
_____Checks the rear zone after braking actions

Putting the Vehicle into Motion

From a Stopped Position
_____Presses firmly on the brake pedal
_____Shifts to proper gear
_____Keeps foot on brake, releases the parking brake
_____Checks traffic front, sides, and rear, using mirrors and head check
_____Signals
_____Checks traffic, sees open zone prior to moving
_____Smoothly accelerates, selecting best lane position and speed
_____Cancels turn signal
_____Checks rear zone

Moving Away from the Curb
_____Checks side view mirror
_____Checks entry lane position for open zone
_____Uses turn signal device (lane changer)
_____Checks mirror blind spot.
_____Adjusts speed for smooth entry to traffic flow

Moving to Curb on Right
_____Checks mirror (half second glance)
_____Activates turn signal device
_____Checks mirror blind spot.
_____Uses vehicle reference to align 3-6 inches from the curb

Locating Reference Points

(Mottola, Interactive Driving Systems)

Reference Point for Right Side of Vehicle
_____Positions the vehicle within 3-6 inches of the curb or lane line
_____Positions the vehicle within 3 feet of the curb or lane line

Reference Point for Left Side of Vehicle
_____Positions the vehicle within 3-6 inches of the curb or lane line

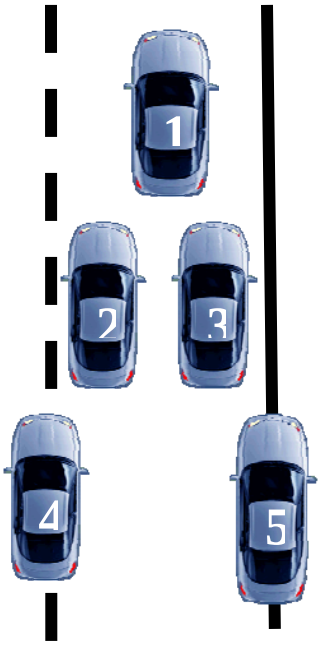
Reference Point for Front of Vehicle
_____Positions the front bumper even with the curb line

Reference Point for Rear of Vehicle
_____Positions the rear bumper even with a line

Reference Points for Turning
_____Positions the front and side of the vehicle for a left turn
_____Positions the front and side of the vehicle for a right turn

Selecting the Best Lane Position

Positions vehicle in lane position 1-5 to get the best line of sight and/or path of travel
(Mottola, Interactive Driving System)



LANE POSITION 1
In the center of the lane
- Allows 3 feet on each side

LANE POSITION 2
0-6 inches from a line to the left
- Used for left turns, parking on the left, and to increase your line of sight

LANE POSITION 3
0-6 inches from a line to the right
- Used for parking against a curb line, and to increase your line of sight

LANE POSITION 4
Straddling a line
- Used to move away from a hazard on the right

LANE POSITION 5
Straddling a line
- Used to move away from a hazard on the left

Searching Intersections

Approaching Intersections
_____Identifies intersection type
_____Searches left/front/right zones
_____Searches 12-15 seconds ahead/45 degrees to either side
_____Searches 4-6 seconds ahead/90 degrees to the side
_____Identifies line-of-sight/path-of-travel restrictions
_____Sees and responds to open/closed zones
_____Checks mirrors and responds to rear zone conditions
_____Recognizes and responds to intersection types
— Recognizes and responds to directional types
— Applies right-of-way rule

Responding to Intersections Signs/Signals
_____Positions vehicle in proper lane
_____Controls speed
_____Stops (when necessary)
— in correct position
— before stop line
— before crosswalk line
— before near edge of intersection
— behind vehicle, see tires
_____Uses staggered stop for space management

Entering Intersections

_____Enters correct lane prior to intersection
_____Checks rear zone before slowing
_____Identifies safe gap before entering

Turning

Turns – From a Stop
_____Monitors intersection traffic signals
_____Searches for pedestrians and vehicles
_____Checks mirrors and blind spots
_____Signals for 100 ft or 5 seconds before turning
_____Gets side position for right and left turns
_____Makes legal stop
_____Gets forward position
_____Searches left, front, and right for open zones
_____Sees 12-15 seconds into the planned path of travel
_____Turns head and looks to the target area before turning the steering wheel
_____Accelerates and turns steering wheel simultaneously
_____Correctly uses push/pull or hand-over-hand
_____Steers towards target
_____Stays within turning lane
_____Recovers wheel at transition peg
_____Accelerates to speed
_____Checks rear zone

Turns – While Moving
_____Monitors intersection traffic signals
_____Searches for pedestrians and vehicles
_____Checks mirrors and blind spots
_____Signals for 100 ft or 5 seconds
_____Reduces speed if necessary
_____Gets side position for right and left turns
_____Searches left, front, and right for open zones
_____Sees 12-15 seconds into the planned path of travel
_____Turns head and looks to the target area before turning the steering wheel
_____Accelerates and turns steering wheel simultaneously
_____Stays within turning lane
_____Uses trail braking if brakes applied during turn
_____Accelerates to speed
_____Checks rear zone

Backing Straight and While Turning

Tracking in Reverse on a Straight Path
_____Checks rear and sides for clear path
_____Shifts to Reverse
_____Adjusts body to see out of rear and side windows
_____Uses accurate steering technique
_____Backs at a walking speed
_____Looks back until stopped
_____Stops smoothly
_____Shifts to Drive

Tracking in Reverse While Turning
_____Checks for visible open path to planned target
_____Turn heads in the direction of the turn
_____Shifts to Reverse
_____Uses balanced hand position, uses hand-over-hand steering
_____Moves slowly, controls speed with brake pedal
_____Steers while looking back, checking front end swing
_____Monitors all four corners of the vehicle until stopped
_____Shifts to Drive

Searching to the Front

Sees Target
_____Identifies a stationary object or area in the center of the intended path of travel

Searches to Target Area
_____Locates target area, evaluates the line of sight or path of travel conditions, and determines best approach speed and lane position
_____Searches and evaluates 12-15 second range to plan speed and path of travel
_____Searches and evaluates 4-6 second range for final decision for speed and path of travel
_____Adjusts speed and/or lane position as needed when search areas cannot be maintained

Searches Near
_____Checks gauges and instruments

Searches Intersections
_____Looks for open zones/space to the left, front and right when approaching and entering an intersection
_____Identifies closed or changing zones/spaces and makes necessary speed and/or lane position adjustments

Searches Curves and Over Hills
_____Evaluates the line of sight and path of travel for appropriate speed and position adjustments when approaching/entering a curve or a hill

Sees and Adjusts for Line-of-Sight Restrictions
_____Changes speed to regain line of sight
_____Changes lane position to regain line of sight

Sees and Adjusts for Path-of-Travel Restrictions
_____Changes speed to regain open path of travel
_____Changes lane position to regain open path of travel

Space Management

Uses Orderly Search
_____Searches 30, 12-15, 4-6 seconds ahead as needed
_____Searches to the sides and behind
_____Searches blind areas
_____Searches for potential hazards

Adjusts Speed for Conditions
_____Adjusts for driver, vehicle, roadway, and environmental conditions

Sees Changes in Line of Sight or Path of Travel (LOS-POT)

_____Recognizes a closed zone, and adjusts speed to arrive at an open zone

_____Adjusts speed to have at least one open side zone

Selects the Appropriate Lane

_____Selects a lane that provides the best line of sight and path of travel

_____Selects lane position furthest from closed or changing space

Controlling Space to the Front

Judges Closure Rate on Approach to Vehicle in Front

_____Approaches the vehicle in front gradually, avoiding a fast closure rate

Maintaining Three to Four Seconds of Following Time

_____Adjusts speed or lane position to maintain 3-4 seconds of time and space when following another vehicle

_____Increases distance when driving conditions are not ideal

When Stopping Behind Vehicles

_____Stops in a position to see the rear tires of the vehicle in front rear tires touching the pavement to ensure a minimum amount of space to maneuver

_____Stops behind a vehicle that has limited visibility to the rear in a position to see the driver in the vehicle's side view mirror

Delays Start Before Moving

_____After the vehicle in front begins to move, delays movement to ensure open the front zone

Controlling Rear Zone

Inside Mirror Checks

_____Searches to the rear after seeing a change in line of sight or path of travel

_____Searches to the rear before and after making a turn or a stop, a speed adjustment, or a lane position change

Outside Mirrors, Convex Mirrors, Mirror Blind Spot Checks

_____Adjusts mirrors to reduce mirror blind spot areas

_____Checks the side view or convex mirror before adjusting lane position

_____Visually checks mirror blind space after checking the side view mirror and before turning the steering wheel

Evaluates Conditions to the Rear

_____Determines if the rear zone/space is open, closed, or changing

_____Adjusts speed or lane position when a tailgater is closing or changing the rear zone/space

Controlling Space to the Sides

_____Uses goal to keep empty space to the side

_____Changes speed to achieve goal

_____Changes lane position to achieve goal

_____Uses communication to achieve goal

Judging Gaps

Judges Safe Gap to Enter and Join Traffic

_____Selects a safe gap when turning right to join traffic

_____Selects a safe gap when turning left to join traffic

_____Selects a safe gap when passing through an intersection

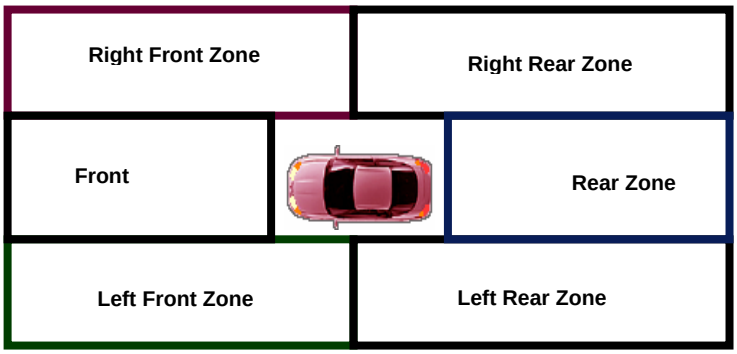
Managing Zones

Six Zones

_____Assesses zones to determine if open, closed or changed zones (Mottola, Interactive Driving Systems)

_____Recognizes closed zone, checks other zones before taking action

_____Selects the best lane position, best speed, and best communication



Communication and Courtesy

Communicates with Other Roadway Users

_____Activates turn signal light at least 5 seconds before turning right or left or moving to another lane

_____Uses headlights at all times to increase visibility

_____Uses horn sparingly to make others aware of presence

_____Taps brake lights to warn rear traffic of a slowdown or stopped traffic flow

_____Adjusts vehicle speed and/or position to communicate intentions

_____Uses proper hand signals when needed to communicate change to other roadway users

_____Monitors other drivers' actions to make sure communications have been received

_____Recognizes domestic and wild animal's locations and anticipates behaviors

Commentary Driving

Uses Commentary Driving to Reinforce Good Driving Habits

_____Begins with a good lane position and speed
_____Identifies LOS-POT conditions
_____Student driver describes actions in response to conditions
_____Identifies traffic control devices

Changing Lanes

Precision Lane Change

_____Determines if change is necessary, legal, safe
_____Looks for open line of sight and path of travel to the front and rear (mirrors, blind spot checks) and sides
_____Checks blind spot
_____Signals for 5 seconds
_____Sees open zone in new lane
_____Checks blind spot
_____Selects safe gap
_____Looks to target area and makes smooth lane change
_____Increases speed, if needed
_____Cancels signal
_____Checks rear mirror for update on traffic to the rear

Using Share Lanes

_____Identifies share lane for turning maneuver
_____Identifies other occupants in share lane to ensure open zone is available
_____Makes safe lane change procedure into share lane
_____Limits travel time in share lane to legal requirements
_____Exits share lane safely

Driving Through Curves

Driving Through Curves

_____Identifies curve in target area
_____Selects approach speed
_____Reduces speed before curve if necessary
_____If braking in a curve uses trail braking
_____Selects best lane position for entry into the curve
_____Searches through the curve to exit
_____Identifies and adjusts for line-of-sight or path-of-travel restrictions
_____Selects best lane position for separation from on-coming traffic through curve
_____Selects best speed and lane position for exiting curve

Managing Vehicle Balance

_____Identifies changes to vehicle balance resulting from
— Steering action
— Acceleration action
— Braking action
— Driver's seating position

Driving Up and Down Hills

_____Sees hill at least 12-15 seconds ahead
_____Approaches in LP1 if no LOS restriction
_____Maintains speed going up hills
_____Moves to LP3 for POT restrictions or hazard
_____Downshifts if necessary for speed control going downhill
_____Checks rear view for vehicles quickly approaching

Passing and Being Passed

When Passing

_____Evaluates gain versus risk prior to attempting a passing maneuver
_____Searches front, side, and rear zones for open zones
_____Determines if a passing maneuver is safe and legal
_____Signals for at least 5 seconds
_____Positions vehicle for pre-pass position
_____Looks to target area, accelerates and moves into new lane
_____Sees vehicle's headlights in rearview mirror
_____Signals for at least 5 seconds
_____Checks blind zone
_____Returns to lane and maintains speed
_____Cancels signal, checks rear zone

When Being Passed

_____Checks rear zone and identifies driver's intent to pass
_____Moves to LP3 to provide space for passing driver
_____Reduces speed if driver needs more space and time to pass
_____If other driver aborts passing, increase speed to give time and space to other driver to return to lane

Making Turnabouts

Two-Point Turnabout—Backing

_____Checks traffic flow
_____Signals, and positions 2-3 feet from curb
_____Drives beyond the driveway and stops
_____Reverses, monitors intended path. Backs slowly, turning steering wheel rapidly to the right to enter driveway
_____Turns wheels left, centering car in driveway
_____Signals left and exits driveway
_____Reverses procedure for two-point turnabout, heading forward into a driveway on the left.

Three-Point Turnabout (used when area is too narrow for U-turn)

_____Evaluates risk and select safest location
_____Signals and move right to 3" to 6" from the right curb
_____Activates left turn signal
_____Checks blind spots
_____Creeps and turns wheel fast to the left
_____Stops before left curb, using forward reference point
_____Places foot on brake and shifts to reverse
_____Rechecks traffic
_____Looks over right shoulder
_____Creeps and turn wheel rapidly to the right
_____Stops before the curb
_____Places foot on brake and shifts to drive
_____Checks traffic and completes the turn

U-Turn

_____Evaluates risk and selects best location
_____Moves vehicle to 3"-6" from right curb
_____Activates left turn signal; checks traffic
_____Creeps and turns wheel rapidly to the left.
_____Completes turn and selects best lane position

Parking

Perpendicular Park—Backing into the Space

_____Selects parking space and activates signal
_____Moves vehicle within 2-3 feet from the parked cars
_____Moves vehicle forward until body appears aligned with the center of the space
_____Creeps forward and turns wheel rapidly to 45 degree angle
_____Looks over shoulder to lines up car with space
_____Foot on brake, shifts to reverse
_____Backs to pivot point then turns vehicle into the space
_____Aligns vehicle with rear reference point

Perpendicular Parking, Forward

_____Checks rear zone, signals
_____Sees center of parking space
_____Positions vehicle eight feet from parking space
_____Turns sharply when the front bumper passes the left (right) rear bumper of the vehicle to the right (left) of the parking space
_____Enters space slowly, checking clearance from other vehicles
_____Straightens wheels, stops at forward reference point

Angle Parking

_____Aligns front wheel 6-8 feet from parked vehicles
_____Sees target without crossing line
_____Controls speed on entry to space
_____Steers to target
_____Aligns vehicle to forward reference point

Parallel Parking into Space

_____Signals
_____Stops alongside vehicle in front (aligned with the driver position of the vehicle to the side, approximately 2-3 feet from vehicle.
_____Shifts to reverse and turns rapidly, while moving very slowly to 45 degree angle
_____Looks back and moves slowly backward until steering wheel aligns with the rear corner of the vehicle
_____Backs into space slowly
_____Positions the vehicle in the middle of the space

Parallel Parking—Leaving

_____Checks vehicle position in parking space (If the tires of the vehicle ahead can be seen, there is no need to back up.)
_____If needed, backs to the rear of the space
_____Signals
_____Checks traffic flow for open zone to enter
_____Looks to target area
_____Smooth merge into new path of travel
_____Adjust speed to traffic flow, check rearview mirror

Parking Uphill/Downhill with/without a Curb

_____Signals
_____Entering Parking Space
- — **Uphill with curb**--turns wheels sharply left before stopping, shifts to neutral and backs to curb
- — **Uphill without curb**-- turns wheels sharply right, shifts to "Park" or first gear
- — **Downhill with curb**—positions vehicle close to curb
- — **Downhill without a curb**—slowly lets wheels creep while turning sharply into the curb

_____Sets parking brake
_____Exiting Parking Space
_____Signals, checks all zones
- — **Uphill with a curb**—remembers wheels are turned, accelerates while releasing parking brake
- — **Uphill without a curb**—slowly lets vehicle creep back while straightening wheels, shifts to "drive" and releases parking brake while accelerating slightly
- — **Downhill with a curb**—remembers wheels are turned, holds brake until ready to shift to "drive" releases brake while accelerating slightly, releases parking brake

_____Checks rear zone

Driving on Controlled Access Highways

Entering
_____Identifies entrance, checks traffic
_____Signals, enters the "on" ramp, adjusts speed
_____Searches and selects safe gap to merge with traffic,
_____Signals
_____Uses acceleration lane to merge smoothly and safely
_____Checks rear zone
Driving on Controlled Highways
_____ Maintains 4 seconds following distance
_____Identifies target area
_____Makes safe and legal lane change
_____Makes safe and legal passing maneuver
— Adjusts for higher speeds
— Adjusts for large trucks passing or being passed
_____Activates cruise control
— Turns off after driving with control "on"
Exiting
_____Identifies exit location at least one mile ahead; moves to far right lane
_____Signals
_____Enters deceleration lane, reduced speed as needed, checks rear zone
_____Enters exit ramp, adjusts speed and lane position
_____Searches for and selects new lane position for entering roadway

Rail Grade Crossings

Railroad Crossings
_____Identifies advance warning and warning signs and signals at highway-railroad grade crossings
_____Checks intersection traffic controls
— Stops at legal stop location
_____At uncontrolled crossings, stops, looks and listens for a train
_____Checks rearview mirror
_____Stops when a train is coming
- before stop line, or
- before gate crossing, or
- before 50 feet of nearest rail

_____Remains stopped until crossing is clear

Responding to Emergency Situations

Responding to Emergency Situations
_____When approached by emergency vehicle, adheres to legal requirements to move over and stop
Identifies and Responds to Vehicle Failures (simulated)
_____Demonstrates the ability to recognize engine, steering, brake, or tire pressure failure and to respond appropriately
Performs Off-Road Recovery (simulated)
_____Demonstrates the ability to recognize traction loss and the appropriate response
_____Demonstrates the ability to control the vehicle when the vehicle's tires drop off of the pavement

Coping with Driver Distractions

_____Distractions outside the vehicle
_____Distractions inside the vehicle
_____Recognize other drivers who may be distracted

10 Good Driving Habits

1. Driver-Vehicle Readiness
2. Keep Car in Balance
3. See Path before Gas
4. Use Reference Points
5. Do the LOS-POT - Eyes and Brain
6. Decisions into Controlled Actions
7. Search before Intersections Left-Front-Right
8. Get Rear Zone Control
9. Get Control with Vehicle in Front
10. Interact Courteously